

06-01-01

PTO/SB/05 (08-00)

A

jc658 U.S. PTO
05/31/01Please type a plus sign (+) inside this box → ☐Approved for use through 10/31/2002. OMB 0651-0032
Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.52(b))	Attorney Docket No.	NORTH-439A/A-2234
	First Inventor	Steven Allen Schwartz
	Title	SYSTEM AND METHOD FOR AUTOMATIC RECOGNITION OF FORMATIONS IN MOVING TARGET INDICATION DATA
	Express Mail Label No.	EL 7 9 4 6 1 0 8 3 8 US

jc903 U.S. PTO
09/870805
05/31/01

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Assistant Commissioner for Patents Box Patent Application Washington, DC 20231
1. <input type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB17) 2. <input type="checkbox"/> Applicant claims small entity status. 3. <input checked="" type="checkbox"/> Specification [Total Pages <u>27</u>] (preferred arrangement set forth below) -Descriptive title of the invention -Cross Reference to Related Applications -Statement Regarding Fed sponsored R & D -Reference to sequence listing, a table, or a computer program listing appendix -Background of the Invention -Brief Summary of the Invention -Brief Description of the Drawings (if filed) 37 CFR 3.73(b) -Detailed Description -Claim(s) -Abstract of the Disclosure Copies of IDS Citations 4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets <u>7</u>] 5. <input checked="" type="checkbox"/> Oath or Declaration [Total Pages <u>2</u>] a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed) i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76	7. <input type="checkbox"/> CD-ROM or C-R in duplicate, large table or Computer Program (Appendix) 8. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27 (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Form (CRF) b. <input type="checkbox"/> Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> paper c. <input type="checkbox"/> Statements verifying identity of above copies a computer program listing appendix ACCOMPANYING APPLICATION PARTS 9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet & document(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney 11. <input type="checkbox"/> English Translation Document (if applicable) 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations 13. <input type="checkbox"/> Preliminary Amendment 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. <input checked="" type="checkbox"/> Other: <u>Express Mailing Certificate</u>

17. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part of prior application No.: _____ /
 Prior application information: Examiner _____ Group/Art Unit: _____
 For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

____ Customer Number or Bar Code Label Insert Customer No. or Attach bar code label here or X Customer address below

Name	Terry J. Anderson, Esq. NORTHROP GRUMMAN CORPORATION				
Address	1840 Century Park East				
City	Los Angeles	State	CA	Zip Code	90067-2199
Country	U.S.A.				

Name (Print/Type)	Bruce B. Brunda	Registration No. (Attorney/Agent)	28,497
Signature	<i>Bruce B. Brunda</i>		Date: 05/31/01

09870805-053101

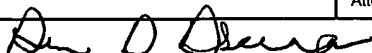
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<h1 style="text-align: center;">FEE TRANSMITTAL</h1> <h2 style="text-align: center;">for FY 2001</h2> <p style="text-align: center;">Patent fees are subject to annual revision.</p>		Complete if Known	
		Application Number	
		Filing Date	Herewith
		First Named Inventor	Steven Allen Schwartz
		Examiner Name	
TOTAL AMOUNT OF PAYMENT	(\$) 786.00	Group Art Unit	
		Attorney Docket No.	NORTH-439A/A-2234

METHOD OF PAYMENT	FEE CALCULATION (continued)																																																																																																																												
<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number <u>14-1325</u></p> <p>Deposit Account Name <u>Northrop Grumman Corporation</u></p> <p>x Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input type="checkbox"/> Payment Enclosed:</p> <p><input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p>	<p>3. ADDITIONAL FEES</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105 130</td><td>205 65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127 50</td><td>227 25</td><td>Surcharge -late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139 130</td><td>139 130</td><td>Non-English specification</td><td></td></tr> <tr><td>147 2,520</td><td>147 2,520</td><td>For filing a request for ex parte reexamination</td><td></td></tr> <tr><td>112 920*</td><td>112 920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113 1,840*</td><td>113 1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115 110</td><td>215 55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116 390</td><td>216 195</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117 890</td><td>217 445</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118 1,390</td><td>218 695</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128 1,890</td><td>228 945</td><td>Extension for reply within fifty month</td><td></td></tr> <tr><td>119 310</td><td>219 155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120 310</td><td>220 155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121 270</td><td>221 135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138 1,510</td><td>138 1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140 110</td><td>240 55</td><td>Petition to revive-unavoidable</td><td></td></tr> <tr><td>141 1,240</td><td>241 620</td><td>Petition to revive-unintentional</td><td></td></tr> <tr><td>142 1,240</td><td>242 620</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143 440</td><td>243 220</td><td>Design issue fee</td><td></td></tr> <tr><td>144 600</td><td>244 300</td><td>Plant issue fee</td><td></td></tr> <tr><td>122 130</td><td>122 130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123 50</td><td>123 50</td><td>Petitions related to provisionai applications</td><td></td></tr> <tr><td>126 240</td><td>126 240</td><td>Submission of Information Disclosure Statement</td><td></td></tr> <tr><td>581 40</td><td>5 81 40</td><td>Recording each patent assignment per property (times number of properties)</td><td>\$ 40.00</td></tr> <tr><td>146 710</td><td>246 355</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149 710</td><td>249 355</td><td>For each additional invention to be examined</td><td></td></tr> <tr><td>179 710</td><td>279 355</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169 900</td><td>169 900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="4">Other fee (specify) _____</td></tr> <tr> <td colspan="2">* Reduced by Basic Filing Fee Paid</td> <td>SUBTOTAL (3)</td> <td>\$ 40.00</td> </tr> </tbody> </table>	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	105 130	205 65	Surcharge - late filing fee or oath		127 50	227 25	Surcharge -late provisional filing fee or cover sheet		139 130	139 130	Non-English specification		147 2,520	147 2,520	For filing a request for ex parte reexamination		112 920*	112 920*	Requesting publication of SIR prior to Examiner action		113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action		115 110	215 55	Extension for reply within first month		116 390	216 195	Extension for reply within second month		117 890	217 445	Extension for reply within third month		118 1,390	218 695	Extension for reply within fourth month		128 1,890	228 945	Extension for reply within fifty month		119 310	219 155	Notice of Appeal		120 310	220 155	Filing a brief in support of an appeal		121 270	221 135	Request for oral hearing		138 1,510	138 1,510	Petition to institute a public use proceeding		140 110	240 55	Petition to revive-unavoidable		141 1,240	241 620	Petition to revive-unintentional		142 1,240	242 620	Utility issue fee (or reissue)		143 440	243 220	Design issue fee		144 600	244 300	Plant issue fee		122 130	122 130	Petitions to the Commissioner		123 50	123 50	Petitions related to provisionai applications		126 240	126 240	Submission of Information Disclosure Statement		581 40	5 81 40	Recording each patent assignment per property (times number of properties)	\$ 40.00	146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))		149 710	249 355	For each additional invention to be examined		179 710	279 355	Request for Continued Examination (RCE)		169 900	169 900	Request for expedited examination of a design application		Other fee (specify) _____				* Reduced by Basic Filing Fee Paid		SUBTOTAL (3)	\$ 40.00
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																										
105 130	205 65	Surcharge - late filing fee or oath																																																																																																																											
127 50	227 25	Surcharge -late provisional filing fee or cover sheet																																																																																																																											
139 130	139 130	Non-English specification																																																																																																																											
147 2,520	147 2,520	For filing a request for ex parte reexamination																																																																																																																											
112 920*	112 920*	Requesting publication of SIR prior to Examiner action																																																																																																																											
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action																																																																																																																											
115 110	215 55	Extension for reply within first month																																																																																																																											
116 390	216 195	Extension for reply within second month																																																																																																																											
117 890	217 445	Extension for reply within third month																																																																																																																											
118 1,390	218 695	Extension for reply within fourth month																																																																																																																											
128 1,890	228 945	Extension for reply within fifty month																																																																																																																											
119 310	219 155	Notice of Appeal																																																																																																																											
120 310	220 155	Filing a brief in support of an appeal																																																																																																																											
121 270	221 135	Request for oral hearing																																																																																																																											
138 1,510	138 1,510	Petition to institute a public use proceeding																																																																																																																											
140 110	240 55	Petition to revive-unavoidable																																																																																																																											
141 1,240	241 620	Petition to revive-unintentional																																																																																																																											
142 1,240	242 620	Utility issue fee (or reissue)																																																																																																																											
143 440	243 220	Design issue fee																																																																																																																											
144 600	244 300	Plant issue fee																																																																																																																											
122 130	122 130	Petitions to the Commissioner																																																																																																																											
123 50	123 50	Petitions related to provisionai applications																																																																																																																											
126 240	126 240	Submission of Information Disclosure Statement																																																																																																																											
581 40	5 81 40	Recording each patent assignment per property (times number of properties)	\$ 40.00																																																																																																																										
146 710	246 355	Filing a submission after final rejection (37 CFR § 1.129(a))																																																																																																																											
149 710	249 355	For each additional invention to be examined																																																																																																																											
179 710	279 355	Request for Continued Examination (RCE)																																																																																																																											
169 900	169 900	Request for expedited examination of a design application																																																																																																																											
Other fee (specify) _____																																																																																																																													
* Reduced by Basic Filing Fee Paid		SUBTOTAL (3)	\$ 40.00																																																																																																																										
<p>FEE CALCULATION</p> <p>1. BASIC FILING FEE</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101 710</td><td>201 355</td><td>Utility Filing fee</td><td>\$710.00</td></tr> <tr><td>106 320</td><td>206 160</td><td>Design Filing fee</td><td></td></tr> <tr><td>107 490</td><td>207 245</td><td>Plant Filing fee</td><td></td></tr> <tr><td>108 710</td><td>208 355</td><td>Reissue Filing fee</td><td></td></tr> <tr><td>114 150</td><td>214 75</td><td>Provisional Filing fee</td><td></td></tr> <tr> <td colspan="3">SUBTOTAL (1)</td> <td>\$ 710.00</td> </tr> </tbody> </table> <p>2. EXTRA CLAIM FEES</p> <table border="1"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103 18</td><td>203 9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102 80</td><td>202 40</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104 270</td><td>204 135</td><td></td><td></td></tr> <tr><td>109 80</td><td>209 40</td><td></td><td></td></tr> <tr><td>110 18</td><td>210 9</td><td></td><td></td></tr> <tr> <td colspan="3">SUBTOTAL (2)</td> <td>\$ 36.00</td> </tr> </tbody> </table> <p>Total Claims <u>22</u> - 20** = <u>2</u> X <u>18</u> = <u>\$36.00</u> Independent Claims <u>2</u> - 3 = <u>0</u> X <u>0</u> = <u></u> Multiple Dependent <u></u> = <u></u></p> <p>**or number previously paid, if greater; For Reissues, see above</p>	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	101 710	201 355	Utility Filing fee	\$710.00	106 320	206 160	Design Filing fee		107 490	207 245	Plant Filing fee		108 710	208 355	Reissue Filing fee		114 150	214 75	Provisional Filing fee		SUBTOTAL (1)			\$ 710.00	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid	103 18	203 9	Claims in excess of 20		102 80	202 40	Independent claims in excess of 3		104 270	204 135			109 80	209 40			110 18	210 9			SUBTOTAL (2)			\$ 36.00																																																																					
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																										
101 710	201 355	Utility Filing fee	\$710.00																																																																																																																										
106 320	206 160	Design Filing fee																																																																																																																											
107 490	207 245	Plant Filing fee																																																																																																																											
108 710	208 355	Reissue Filing fee																																																																																																																											
114 150	214 75	Provisional Filing fee																																																																																																																											
SUBTOTAL (1)			\$ 710.00																																																																																																																										
Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid																																																																																																																										
103 18	203 9	Claims in excess of 20																																																																																																																											
102 80	202 40	Independent claims in excess of 3																																																																																																																											
104 270	204 135																																																																																																																												
109 80	209 40																																																																																																																												
110 18	210 9																																																																																																																												
SUBTOTAL (2)			\$ 36.00																																																																																																																										

SUBMITTED BY:

Complete (if applicable)

Name (Print/Type)	Bruce B. Brunda	Registration No.	28,497	Telephone	(949) 855-1246
Signature		Attorney/Agent		Date	05/31/01

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231

09870805 "05"101

Certificate of Mailing under 37 CFR 1.8 or 37 CFR 1.10

- ☐ I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:
- ☒ I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10, Express Mail No. EL 7 9 4 6 1 0 8 3 8 US addressed to:

Assistant Commissioner
For Patents
Box Patent Application
Washington, D.C. 20231

on May 31, 2001
(Date)

Dawn L. Mangino
Signature

Dawn L. Mangino
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

1. Utility Patent Application Transmittal (1 pg);
2. Fee Transmittal for FY 2001 (1 pg) (in duplicate);
3. Patent Application of (27 pgs);
4. Drawings (7 pgs);
5. Declaration for utility or Design Patent Application (2pgs);
6. PATENTS ONLY Recordation Form Cover Sheet (1 pgs);
7. Assignment of Application (2 pgs);
8. Associate Power of Attorney (1 pg);
9. Return Postcard to acknowledge receipt.

09870805-053101

1c903 U.S. PTO
09/870805

10/16/50